

The Zimbabwe Bulletin of Teacher

Volume 5 No 2 July 1997

ISSN No-1022-3800

CONTENTS

Section 1: Refereed Section

The Curriculum Change Process- The Case of 'O' Level Geography in Zimbabwe.

Ernest M. Munowenyu 1

Parental Involvement in the Education of Children with special needs.

H.M. Rinashe 20

Knowledge base and reflective practice in teacher education in Zimbabwe Curriculum continuity or ideological confusion?

Overson Shumba 28

Approaches to Teaching Practice and their implications for Teacher Education Programmes in Zimbabwe.

Patson Virira Moyo 43

Pedagogical Perspectives of the Philosophical and Grammatical Paradigms of the French Language.

Matthew Anthony Izuagie 51

The Zimbabwe Bulletin of Teacher

Volume 5 No 2 July 1997

ISSN No-1022-3800

CONTENTS

Section 1: Refereed Section

The Curriculum Change Process- The Case of 'O' Level Geography in Zimbabwe.

Ernest M. Munowenyu 1

Parental Involvement in the Education of Children with special needs.

H.M. Rinashe 20

Knowledge base and reflective practice in teacher education in Zimbabwe Curriculum continuity or ideological confusion?

Overson Shumba 28

Approaches to Teaching Practice and their implications for Teacher Education Programmes in Zimbabwe.

Patson Virira Moyo 43

Pedagogical Perspectives of the Philosophical and Grammatical Paradigms of the French Language.

Matthew Anthony Izuagie 51

ABOUT THE CONTRIBUTOR:

- Overson Shumba is in the Teacher Education Department, University of Zimbabwe and is also an expert Science education.

**Knowledge base and reflective practice in teacher education in Zimbabwe
Curriculum continuity or ideological confusion?**

by

**OVERSON SHUMBA
DEPARTMENT OF TEACHER EDUCATION
UNIVERSITY OF ZIMBABWE**

Abstract

This is a contribution and critique of the debate initiated by Dzvimbo's (1991) article on the nature of knowledge and discourse practices in Zimbabwe's teacher training colleges (Zimbabwe Bulletin of Teacher Education, Volume 1, Issue 1). Dzvimbo's paper is important in that it underscores the importance of teacher education to educational and social reform. That teacher education is significant is obviated by the fact that in many countries in the Third World, schools, classrooms and teachers are among the most important determinants of pupil learning and achievement often more significant than socio-economic status (Riddell, 1989). While the basic thesis of the Dzvimbo paper that discourse and reflective action are necessary for professional growth in teacher education is supported, certain substantive assumptions in the paper are controversial. This paper is an attempt to highlight some of the substantive aspects afflicting the potential for professional growth in teacher education. It proposes that ideological confusion as well as historical precedent rather than simple curriculum continuity are the chief determinants of the present status of teacher education. The assumption of ideological consciousness transferring, inducing or supporting professional growth is not supported.

Highlights of Controversial Aspects in Dzvimbo's Thesis

This paper challenges some of the assumptions in the Dzvimbo (1991) article and provides some alternative foci for reflective discourse. First, he made the implicit

assumption that teacher educators and student teachers in the teachers colleges are on the vestige of reflective education but that some external causes or agents downplay the potential. Second, while Dzvimbo's paper is clearly pro-socialism and bemoans the relative stability of residual colonial practices which were based on the dichotomous ideology of capitalism, it fails to account for the probable causes of curriculum continuity on factors within teachers colleges rather than those external to them. Further, it is not clear why Piagetian models, from which neo-constructivist, information processing models, and constructivist models originated are categorically dismissed as irrelevant for Zimbabwe and what assumed relationship they might have with demand for technical skills (see p. 44). Dzvimbo overemphasizes the untested (probably untestable) relationship between the role of ideological political processes based on 'political economy', which itself has been rejected in Zimbabwe (see for example Jansen, 1991), and reflective practice in teacher education. Overemphasis on political processes and related rhetoric leads to ideology confusion. Ideology confusion in the education system particularly for teacher educators is increasingly a potential threat to educational transformation in light of the shift toward non-socialist methods and procedures in the productive sectors since economic reforms began in 1991. This paper rejects the implicit assumption that political ideology, regardless of whether one labels it 'emancipatory', is a useful or significant source of reflective thought and that mastery of political ideology necessarily transfers, induces or supports professional growth in teacher education.

Reflective understanding and discourse must at least be concerned with altering the role of the state in curriculum planning assumed at independence to be representative (Jansen, 1990) to preferred participatory forms in which the teaching profession as whole is part of. It is not enough to just have teachers colleges, as Dzvimbo (1991) proposes, "devise autochthonous forms of knowledge that can be used as a basis of curriculum development nationwide" (p. 44) since other more established mechanisms by which curriculum making occurs are already in place. Further, the downplay of technical skills as 'behavioral psychology' (p.44) in Dzvimbo's paper is not easy to understand given the technical-vocational-oriented educational policy guiding current reform efforts. It is not clear in the paper how schools produce cheap labour for the employment sector whose absorptive capacity of school leavers is minimal anywhere (see the Central Statistical Office's (1991) intercensal survey). Commonly it is persons that lack technical skills that

provide cheap labour and the system is seriously attempting to reverse this as later demonstrated in citation of policy. Dzvimbo's assertion that "teacher education is being called upon to produce graduates who will in turn produce secondary school graduates who can be part of a movement that will (in theory) assist the country in its goals of industrialization" (sic) (p.45) reflects a surprising degree of scepticism to the basic purpose of schooling in Zimbabwe.

I could not find the evidence in the Dzvimbo paper or another source to suggest the notion that "the State does not control the content of what is taught in colleges because fragments of the previous discourses and the dominant behaviourist paradigm still have a tremendous impact on the curriculum" (p. 45). First, state control in teacher education is not a solution since difficulties associated with acceptance of the curriculum in schools are already associated with its legitimating efforts (Jansen, 1990) and 1991). Further, the centre periphery curriculum development and diffusion strategies the state adopted assume that it is representative and this resented, not only by teachers' colleges but by serving teachers. Attempts to justify existence of 'residual' or 'previous discourses' in teacher training colleges on institutions external to teachers colleges are not based on strong evidence in the Dzvimbo's paper or any other I have been able to find. For example in the Department of Teacher Education (and the Psychology Department) at the University of Zimbabwe, there is ample evidence to show that the courses offered include information processing, constructivism, and other modern cognitive science theories. Behaviorism is no longer a tradition in the education system and in particular many curricula in Zimbabwe require teachers to utilize a process inquiry approach which hardly epitomizes behaviorism (but teachers are failing to do so). Further, lack of professional growth inducing resources such as journals and texts rather than ideological squalor leads educators to be a decade or so behind frontiers of knowledge in their understanding and in their practice. No amount of 'ideological wiseness' will substitute for provision of inputs such as textual media and other resources in the teachers colleges and in all other educational institutions. Ideological shifts or metamorphoses tend to require decades to occur and the education system cannot simply stagnate while this process, which frequently falters, takes its unpredictable course.

Discourse on Professional Growth

The significance of schooling related factors to student achievement and learning

leads the author to adopt a definition of professional growth which reflects it as changes over time in the behaviour, knowledge, images, or perceptions of teachers and educators as postulated by Kagan (1993). Rather than assume that ideological conscious transfers into professional growth, reflective discourse should at the minimum focus on the behaviours, knowledge, images, beliefs or perceptions of teachers and educators which are most related to teaching task domains with the intent of shifting them towards more professionally desired directions. Any form of reflexive understanding and practice thus must be based on understanding of at least four such task domains (Kagan, 1993; Reynolds, 1993). Teaching task domains are more demonstrably associated with professional growth and are more generally accepted as constituting the purposes of teacher education. Reynolds (1993) identifies four teaching task domains, three of which are most directly instructional-related viz the pre-active, interactive, post-active, and a fourth the administrative tasks which are less directly instructional-related. Pre-active tasks include comprehending the curriculum content and materials and thus involve curriculum interpretive skills such as critiquing and adapting content, materials, teaching methods, and preparing to deliver instruction. Interactive tasks are those pertaining to the instructional process and they involve organizing and monitoring students learning. According to Reynolds (1993) the post-active task involve reflection upon the teachers actions and student responses, continued professional development and interaction with colleagues. Reflective understandings, skills, abilities, knowledge, and beliefs related to pre-active, interactive and post-active tasks are fundamental in teacher education because these tasks are usually at the intersection of teachers or educators, students, and the subject matter. Further, Reynolds (1993) observes the need for personality characteristics, those interests, temperaments, personality traits, and moral/ethical standards that "suggest what the teacher (or educator) is likely to do rather than how well he or she can do at peak performance" (p.5). Thus in terms of reflective discourse and practice certain understandings stand out as pertinent. First, is the issue of what teachers and educators know and believe about subject matter, the structure and relationship of the subject matter to society and everyday life in particular how to apply it to solve meaningful problems. Second, the general principles of teaching and learning including the specific instructional techniques, lesson structure and class management, history and philosophy, curriculum planning and assessment. Third, content-specific pedagogy constitutes a vital aspect of understanding. These areas, commonly taken for granted but constituting the important aspects of the teaching profession, are least developed in teacher training colleges and in the teaching profession. As can be expected, discourse on these tasks are curriculum specific and thus require thorough understand-

ing of the curriculum-to-be-implemented and changes that are likely to occur during the course of implementation. At this point of development, ideology confusion within the state and among educators has most likely been contributory to masking these issues or the direction of which reform must take. What it takes for professional growth can be demonstrated with reference to a recent article by Daniel Duke (1993). Duke (1993) observes that: "A profession is never mastered, professionals grow older and face different life circumstances. Clients change. New research and technology appear. Social and political priorities are reordered" (p. 702). It follows therefore that experience is not necessarily equivalent to professional growth Duke (1993) notes:

Adults learn all the time, but growth, particularly professional growth is rarer. As teachers gain experience, they may perceive less need to grow. New knowledge is increasingly filtered through well-formed cognitive structures, with the result that dissonant information is often excluded or discredited. Only knowledge that confirms prior beliefs and assumptions tends to be absorbed (p. 703).

These cognitive filters might account for the present poor state of new curriculum implementation and thus account partially for curriculum continuity (Jansen, 1991) or residual practice (Dzvimbo, 1991). The lack of responsiveness of colleges has been accounted for in several ways (see for example accounts of Chivore, 1986, and Dzvimbo, 1989). While institutions such as the Department of Teacher Education can control minimum teaching entry standards, it remains the responsibility of the teachers colleges to ensure professional growth among college faculty and that their students evolve the necessary commitment to the profession of teaching so that professional growth continues to occur well into their teaching careers.

Participatory Processes

It is the responsibility of both the teachers colleges and the Curriculum Development Unit to ensure through complimentary action, that teachers produced are confident and competent to implement the new curriculum (Ministry of Education, 1987). The removal of teacher education from the Ministry of Education has only aggravated difficulties of coordination in this endeavour and contributes substantially to the colleges inability to support school level curricula. Any attempts to portray the nature of the knowledge base and teacher discourse therefore must articulate the relationship between colleges of education and the state. In particular their relationship to the

curricula and national objectives and how they propose to ensure their attainment. A major problem in this regard has been the assumption that the state is representative (Jansen, 1991) and hence non-participatory procedures or centre periphery strategies to curriculum making and dissemination were initially adopted with colleges at the periphery. Discourse, should lead to increased participatory curriculum reform by all with a stake in education (students, teachers, parents, educationists and educators) to increase complementarity between the college curriculum and the school curriculum. It cannot be simply assumed that radical change can occur from within colleges of education and that residual effects of colonial education mentioned in Dzvimbó's paper are gripping educators in institutions other than teacher training colleges. A more collaborative and collective approach is desired. In effect many of the state mandated curricula in schools are radical departures from those in colonial practice and the resistance to some of the changes in them has to do with the lack of preparedness of teachers to implement the curricula as predicted could happen by Ministry of Education and Culture (1987). While the observation in many countries of the relative stability in the colonial content during the post-colonial period is applicable to Zimbabwe (Jansen, 1991), the origin of this is mainly lack of re-training, rather than simple preference for past practice or conservatism. In their concerns-based-adoption model (CBAM), Hall and Hord (1987) suggest that new innovations threaten the relative stability and comfort of the status quo and lack of training largely leads to non-use or inappropriate use and implementation of the curriculum.

Responsiveness to School Sector Needs

A fundamental contention of this paper is that colleges must be responsive to the curriculum needs of the school sector and that any discourse must clearly address itself substantially to this need. The general introduction to the Science Syllabus 5006/7, for example, gives a fairly representative philosophy and rationale for curricula innovation in Zimbabwe (these also provide the guiding principles of The Curriculum Development Unit Plan, 1986-1990):

the majority of Zimbabwean pupils are likely to find places in institutions of higher training and learning. The school certificate examination will, therefore, be a terminal one for this majority before they go out to work. education, particularly at secondary level, should prepare the majority of pupils for the world of work while at the same time helping the minority

high-achievers to qualify for institutions of higher learning.

Reflective discourse must be based on critical appraisal of these realities and interests, and on the purpose of state-led curriculum change. For example curriculum change was initiated to:

- inculcate values such as the work ethic and the usefulness of productivity, patriotism, cooperation and an understanding of Zimbabwe regional and world history, culture, politics, and ideology.
- integrate within the curriculum the philosophy of education with production in order provide the many who are unlikely to go on to institutions of higher learning with an education which will be functionally useful in the world of work.
- help pupils relate knowledge and theory to their practical application in production within the context of Zimbabwe.
- incorporate social, scientific and technological content and concepts wherever possible across the curriculum so that the essential general knowledge is accessible to as many people as possible.

Reflective discourse must therefore seek to amplify and clarify those skills necessary to be 'functional' in society and to the 'essential general knowledge' which otherwise remains transparent and mysterious. The skills and knowledge then could serve as the target standards of attainment in schools and in teacher education.

Curriculum Continuity or Ideological Confusion?

The existence and persistence of curriculum continuity (Jansen, 1991) or residual practice (Dzvimbo, 1989) might also be explicable on the presumption of ideological confusion. Many (if not most) educators were trained and continue (and will continue) to be trained in capitalist systems yet the curriculum is clearly socialist orientation (with changes to that orientation evident in the 1990s). No significant practical re-training was done after gaining independence and thus it remained to the independent inventiveness of educators to learn, understand, and appreciate socialism and its methods on their account yet for much of their lives, their experi-

ences, in particular their education was under a capitalist system. As would be expected under such conditions, many educators never acquired base-line 'socialist' skills and methods. This was (and is) aggravated by the fact that in the political system very few (none I know of) modeled honestly the socialist style of doing things even though socialist theory was often prominently featured (and often features) in speeches and rhetoric for public consumption (especially in the 1980s). As a result of a combination of lack of training, lack of resources, and lack of models, ideological confusion must be rampant (but cleverly concealed) in society and among Zimbabwe's educators. It is ideological confusion that must significantly account for most of the curriculum continuity (Jansen, 1991) or residual practice (Dzvimbo, 1991).

Jansen's (1991) analysis is illuminating in this regard. He suggests that the state-led curriculum change was itself accompanied by divergent and contradictory ideological motivations and consequences, which agreeably must be confusing, even to the most inventive educators. First Education with Production (EWP) is the curriculum innovation most closely associated with socialist policy. It emphasises vocationalism, productive activities, and self-reliance. Second, ZIMSCI (Zimbabwe Science), a widely heralded innovation, is not 'socialist' by any measure; it is a program that already existed prior to independence with the general characteristics of modern science-fostering inquiry, experimentation, and student-centred learning.

At present, there is not single or consistent ideological orientation to the curriculum reconstruction program. This ideology crisis, which could easily have been aggravated by the crash of communism in Eastern Europe and by Zimbabwe's capital-oriented economic reforms of 1991, is a serious condition for any education system to develop and grow in; it behooves not only educators but political leaders to ameliorate this crisis. For these and other reasons, EWP and other socialist oriented curricula remain largely in poor state of implementation or abandoned. Teacher education takes the major brunt of the criticism for the present lack of responsiveness of the colleges to school level curricula. For an example, some secondary student teachers (in their term 2 of their year) in a recent science education study (Shumba, 1992) articulated realistic sentiments on the system such as the following excerpts:

The science curriculum in Zimbabwe has seen a lot of distortion in that what is put down to be taught is not matched with the economic, technological and material transformation of the country and hence the syllabus taught has ended being a nuisance to the learners.

They spoke of what may be a serious situation in the education system in particular teacher education.

The material taught in college has virtually no connection to the 'O' Level syllabus, and so we go into the field without knowledge of the difficult sections of the syllabus. Colleges must really concentrate on equipping students with techniques and approaches for teaching science to a specific level of students.

A number of the student teachers in 1992 gave a picture of the state of their preparedness for the socialist curriculum with six months left before completing their pre-service teacher preparation:

I am about to graduate and I do not even know what education with production means.

Education with production is something I hear in theory and in passing and I do not even know what it is.

These comments were extracted from Appendix II of a technical report, *Secondary Level Science Education in Zimbabwe: An Analysis of Curriculum Structure and Implementation Environment* (pp. 183-184). Sentiments such as these suggest that colleges have not begun to implement curricula compatible with those in the sector of schooling their teachers will serve. The consequences are serious when viewed in light of evidence obtained from other educational contexts. Teachers studied in western culture lacking in procedural knowledge with new curricula were most likely to become increasingly authoritarian, custodial and generally obsessed with class control (Kagan, 1993). Further they became concerned with planning, designing and implementing lesson plans, not for promoting learning, but to discourage misbehaviour.

Lack of responsiveness to school curricula is a serious concern in light of educational policy. Although the economic reforms basically represent a weakening of the resolve to accomplish transformation by a socialist route, it is important to observe some of the key elements in the *Five Year National Development Plan, 1991-1995*. The Plan hints at ideological duality now characterizing the political and educational system in Zimbabwe; while the productive sectors are to be competitive along

capitalists lines controlled by market forces, the education system is expected to continue on the socialist route. The following are some of the elements which stand out in the most current five year development plan.

- emphasis on economic efficiency and productivity in which "government will continue with its efforts to make the country's education system more responsive to skills required by the economy" (p. 18).
- greater participation of all citizens in economic and social transformation since "the process of development cannot take place without the active and full participation of the people. People's participation in the development process is the foundation of self-reliant and self-sustained development" (p.3). creating and implementing a relevant education system that would reduce the 'wide' technical skills gap between the school leaving population and the-market and hence the need to "produce school leavers who could fit more easily into the existing job market" (p. 71).
- sustenance of the philosophy of education with production (EWP) introduced in 1980 in an attempt to 'vocalize' programs in order to prepare students for the world of work and to make them self-reliant. Policy articulates an 'applications-based' approach to school science education.
- more cogent attention to in-service and staff development training of science and technical subject teachers so that teacher training would respond effectively "to the scientific and technical emphasis urgently if Zimbabwe is to cope with the technological changes necessary for sustained economic growth and development" (p. 78).

Responsiveness to Productive Sector

As can be readily deduced, national policy emphasises that education should develop the technical skills required in the industrial, commercial and agricultural sectors of the economy. Dzvimbo's (1991) paper acknowledges but criticizes this orientation. Sentiments against technical-oriented curricula and education is bedeviled by historical precedent that projected academic education as superior to vocational education (see Mungazi, 1986 and 1989). Jansen (1991) observes that the rejection of the 'political economy' curriculum represents conflict between social forces, for example, those

favouring the academic curriculum and those favouring the vocational curriculum.

It is possible that the vocational curriculum is perceived (by educators and the general populace) in terms of this historical precedent in particular its relationship to practical training of underprivileged Africans by successive repressive governments in the colonial era. As early as 1930, practical training was designed to train the Africans to function effectively as labourers in order to meet the needs of the growing industries and at the same time "control the development of intellect among Africans and condition them to tribal settings" (Mungazi, 1989; p. 472). After 1966 a new ten year plan introduced two year junior secondary which catered for stratum of the primary school cohort with an emphasis on prevocational skills. The curriculum thus spent about 45 percent on practical subjects (Dorsey, 1989) in attempting to prepare student who would be more acceptable to industry, commerce and agriculture. Black Zimbabweans considered this education inferior and as would be expected in the circumstances rebuffed it. Reflective teacher education should therefore clearly articulate their interests vis-a-vis national curricula and provide technical and professional support for the national objective of providing an academic curriculum which also serves, equally, the vocational interests and other practical-application-oriented needs. Any attempts that fail to take cognizance of the present role of the state in curricula determination and the reasonable objectives carried in some of the state mandate curricula can only result in retrogressive confrontation. Through reflective action, teacher education should analyze, adapt, and re-mould the basic curriculum frameworks already in existence and not to start afresh as implied by the assertion that teachers colleges should "devise autochthonous forms of knowledge that can be used as a basis of curriculum development nationwide" (Dzvimbo, 1991; p. 44). A complete re-education of society in its entirety on the role of technical skills and applications-oriented curricula is as much an imperative for industrialization as it is for overcoming the domineering affects of historical precedent and colonialism.

Reflective action and discourse should articulate how the academic knowledge might be used in practical situations and vice versa illustrating the umbilical connectedness and symbiocity between them. One of the widely acknowledged philosophers, John Dewey, is among the first to confront the issue of education and praxis. According to a quote in Mayhew and Edwards' (1936) account of the Dewey School, Dewey (1904) stated: "Utility and culture, absorption and expression, theory and practice are indispensable elements in any educational scheme" (p. 16).

If education is indeed instrumental to national social and economic development as acknowledged in Dzvimbo's (1991) paper, then it must be practical-applications based. Dewey wrote about the "the fatal split" in education which persists to this day:

For genuine intellectual development it is impossible to separate the attainment of knowledge from its application. The divorce between learning and its use is the most serious defect of our existing education (cited in Mayhew and Edwards, 1936; p. 33).

Seeding and Sustaining Professional Growth

Reflective practice has not taken root partially because the role of professional associations remains peripheral in centralized bureaucratic systems. In the case of Zimbabwe the need for the professional associations to focus their terms of reference well beyond negotiating conditions of service is imperative. In the developed nations, the re-education or continuing education of teachers is stimulated and influenced by teachers themselves through professional associations for teacher and educators in individual subject areas. For example, the Association of Science Educators in the U.K. and the National Science Teachers Association in the U.S.A. give definitive policy statements in the direction science education should take. Such organizations publicly debate the place of a subject in the curriculum, initiate development of school curricula, and analyse implementation strategies and other alternative courses of action and in general share experiences on classroom practice and associated practical problems. With the increased demand for content-specific pedagogy (Reynolds, 1993) and given the fact that professional development is increasingly accomplished through inter-collegial and inter-institutional interaction and discourse, this is necessary direction to consider.

Finally, education in Zimbabwe is often dogged by the narrow conception of teacher education, which erroneously appears to be viewed as limited to the initial training of teachers in the colleges as characterized in a couple of articles that address themselves to the problems of teacher education (Dzvimbo, 1989; Chivore, 1986). While I agree with their assessment in general, the articles create an impression that teacher education is the responsibility of teachers colleges and the university only through the Department of Teachers Education. In reality at least four departments in the Faculty of Education are concerned with the in-service training of teachers with specialization in specific aspects, e.g., Curriculum and Arts Education, Science and Mathematics,

and others. The lack of concerted and coordinated action leads to the overall piecemeal conception and perception of teacher education in Zimbabwe which makes the Department of Teacher Education an easy scapegoat for perceived failures in the teachers colleges.

Discourse that attempts to ensure continuity and compatibility between pre-service and in-service education (non-graduate) is fundamental. Continuing education of teachers in Zimbabwe and their probable resultant professional growth should be better perceived and more articulately coordinated than presently for teacher education to be continuous, from school, pre-service and in-service. In Zimbabwe, while not readily acknowledged, the beliefs and images about the teaching profession are simplistic and even naive; in society everyone who has been through formal educational has some impression of the role and functioning of teachers, which unfortunately is let to persist by a profession that fails to define itself expertly.

Conclusion

This paper demonstrated some of the substantive aspects that should constitute the substance of discourse in teacher education at this developmental level of the education system. For now, barring radical transition, the state evolved goals of the curriculum are relevant and are accomplishable but are well ahead of innovation in teacher training colleges. Only a modest level of articulation exists between college curricula and state mandated curricula at the school level. The assumption on which school curricula are based should continually be challenged. For example, participatory mechanisms for devolving curricula are necessary and thus the assumptions that the state is representative is not substantive. Further, ideological confusion has not been quarantined to within the state, it is certainly more widespread among and within communities of educators at all levels than we wish to acknowledge, for fear of reprisals, real or imagined, by the state. Potential exists so that performance in teacher education will be controlled by "self-imposed standards of knowledge and ethics and by peer group surveillance, rather than by directives from administrative officials" to borrow from Raubinger, Sumption and Kamm (1974). The present bureaucratic arrangements might in fact be inducing among teacher educators some variance of "trained incapacity" (Silver 1983) whereby because of the preoccupation of officials in a bureaucracy in legitimating their authority, expertise of individual persons and educators are not tapped for the benefit of the system. The assumption of ideological consciousness, emancipatory or otherwise, transferring, inducing or sustaining professional growth in teacher education is unfounded.

References

- Central Statistical Office, (1991). Inter-censal demographic Round 1, 1987. Harare: Central Statistical Office.
- Chivore, B.R.S. (1986). Teacher education in post-independent Zimbabwe: problems and possible solutions. Journal of Education for Teaching, 12(3), 205-231.
- Dorsey, B.J. (1989). Educational development and reform in Zimbabwe. Comparative Education Review, 33(1), pp. 40-58.
- Duke, D.L. (1991). Removing barriers to professional growth. Phi Delta Kappan, 74(9), pp. 702-712.
- Dzvimbo, K.P. (1989). The dilemmas of teacher education reform in Zimbabwe Interchange, 20(4), pp. 16-31.
- Dzvimbo, K.P. (1991). Education for liberation and development a comparison of Cuban and Zimbabwean educational practices, Zimbabwe Journal of Educational Research, 3(3), pp. 281-308.
- Dzvimbo, K.P. (1991). A critical reflection of the knowledge base of teachers colleges in Zimbabwe. The Zimbabwe Bulletin of Teacher Education, 1(1), pp. 43-58.
- Hall, G.E. & Hord, S.M. (1987). Change in schools: facilitating the process. State University of New York, Albany.
- Jansen, J.D. (1990). Curriculum policy as compensatory legitimization? A view from the periphery. Oxford Review of Education, 16(1), pp. 29-38.
- Jansen, J.D. (1991). The state and curriculum in the transition to socialism: the Zimbabwean experience. Comparative Education Review, 35(1), pp. 76-91.
- Kagan, D.M. (1993). Professional growth among pre-service and beginning teachers. Review of Educational Research, 62(2), pp. 129-169.
- Mayhew, K.C. & Edwards, A.C. (1936). The Dewey School: The laboratory school of the

University of Chicago 1896-1903. New York: D. Appleton-Century Company.

Ministry of Education and Culture, (1992). Science 5006 and Extended Science 5007 Syllabus SS10 (ZIMB) 1992. Harare, Zimbabwe: Ministry of Education and Culture.

Ministry of Education and Culture, (1987). The Curriculum Development Unit Plan, 1986-1990. Harare, Zimbabwe: Ministry of Education and Culture.

Mungazi D.A. (1986). Educational innovation in Zimbabwe: possibilities and problems. The Journal of Negro Education, 54(2), pp. 196-212.

Mungazi, D.A. (1989). To bind ties between the school and tribal life: educational policy for Africans under George Stark in Zimbabwe. The Journal of Negro Education, 58(4), pp.196-212.

Raubinger, F.M., Sumption, M.R., & Kamm, R.M. (1974). Leadership in the secondary schools. Charles E. Merrill Publishing Company: Columbus, Ohio.

Republic of Zimbabwe, (1991). Second Five-Year National Developing Plan 1991-1995. Harare: Government Printer.

Research Council of Zimbabwe. (1991). The national science technology statement (draft). Harare, Zimbabwe.

Reynolds, A. (1993). What is competent beginning teaching? A review of the literature. Review of Educational Research, 62(1), pp. 1-5.

Riddell, A.R. (1989). An alternative approach to the study of school effectiveness in third world countries. Comparative Education Review, 33(4), pp. 481-497.

Shumba, O. (1992). Secondary level science education in Zimbabwe: An analysis of curriculum structure and implementation environment. Technical Report Research Board Grant No 2.9951.10/NO26.

Silver, P. (1983). Educational administration: Theoretical perspectives on practice and research. Harper and Row Publishers Inc. Cambridge.



This work is licensed under a
Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see:
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

This is a download from the BLDS Digital Library on OpenDocs
<http://opendocs.ids.ac.uk/opendocs/>